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Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/525,412	SHEPPARD ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Scott Beliveau	2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 29 October 2004.
- 2a) This action is FINAL.                            2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-58 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) 54 and 58 is/are allowed.
- 6) Claim(s) 1-47, 50-53 and 55-57 is/are rejected.
- 7) Claim(s) 48 and 49 is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |  |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                    | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)              |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____. | 6) <input type="checkbox"/> Other: _____.  |

## DETAILED ACTION

### *Priority*

1. Applicant has not complied with one or more conditions for receiving the benefit of an earlier filing date under 35 U.S.C. 120. In particular, the later-filed application must be an application for a patent for an invention which is also disclosed in the prior application (the parent or original nonprovisional application or provisional application); the disclosure of the invention in the parent application and in the later-filed application must be sufficient to comply with the requirements of the first paragraph of 35 U.S.C. 112. See *Transco Products, Inc. v. Performance Contracting, Inc.*, 38 F.3d 551, 32 USPQ2d 1077 (Fed. Cir. 1994). The priority derived from the Eames et al. reference includes subject matter pertaining to the configuration of the residential gateway (Figures 1-4), but does not provide priority as to the interconnection/installation of the gateway illustrated in Figures 3-5 of the Swisher et al. reference. Claims 1-3, 18-20, 35, 39-41, and 44 shall receive the benefit of the filing date of the Provisional Application No. 60/038,276 of 19 February 1997 and claims 4-17, 21-34, 36-38, 42, 43, and 45-58 are accorded with the filling date of the instant application or 15 March 2000.

### *Specification*

2. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). The specification describes the residential gateway as a collection of interconnected modules some or all of which may be located within or outside the residential gateway. As such, the specification

does not explicitly describe the residential gateway using the phrase “unitary device”, but would appear to have support as originally filled given that the embodiment of the residential gateway may be housed within a single enclosure.

***Response to Arguments***

3. The OFFICIAL NOTICE stating that the particular usage of an integrated “optical receiver” in conjunction with video program distribution device is notoriously well known in the art was not traversed and is accordingly taken as an admission of fact.
4. Applicant's arguments with respect to the rejection of claims 47-49 in view of the Swisher et al. reference have been fully considered and are persuasive. The rejection of claims 47-49 under Swisher et al. has been withdrawn.
5. Applicant's arguments filed 29 October 2004 have been fully considered but they are not persuasive with respect to claims 50 and 57.

With respect to applicant's arguments that the diplexer [620] fails to “extract channel select commands from a signal for the use of a residential gateway”, the examiner respectfully disagrees. In particular, signal received via diplexer [620] appears to comprise both VDSL and RF/TV signals, however, it is also the examiner's understanding that it further comprises “channel select commands” associated with upstream remote IR receivers [710] which are extracted from the combined signal alongside the RF/TV signals.

6. Applicant's arguments with respect to claims 1-46, 51-53, 55, and 56 have been considered but are moot in view of the new ground(s) of rejection.

***Double Patenting***

7. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

8. Claims 2 and 19 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 and 9 of co-pending Application No. 09/526,100. Although the conflicting claims are not identical, they are not patentably distinct from each other because the differences between the two are either encompassed within the claim of the instant application or are comprise a minor rewording of limitations.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

***Claim Rejections - 35 USC § 112***

9. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

10. Claims 4-12 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. In particular, claim 1 requires that the residential gateway is capable of directly receiving channel select commands from the plurality of remote control devices. The specification and embodiment of Figure 5, illustrates that the gateway is capable of receiving channel select commands directly via either a UHF [470] or IR interface [472] (IA: Page 18, Lines 6-27). The embodiment of Figure 7 is disclosed as receiving channel select commands only directly via IR interface [472] associated with a remote control device located in close proximity to the residential gateway. Channel select commands corresponding to UHF signals are received [750] indirectly in so far as to channel select commands are modulated and distributed via intermediate units including Remote Antennae Packages [900] and Remote Antennae Modules [920] (IA: Page 21, Lines 7 – Page 22, Line 13). Accordingly, the claims directed towards the particular usage of intermediate devices so as to modulate channel selection

commands onto the in-home network are contradictory in view of the requirement that the residential gateway be capable of directly receiving channel select commands.

11. Claims 22-34 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. In particular, claim 18 requires that the residential gateway is a “unitary device”, but claims 22 and 32 disclose that the residential gateway further comprises a “media interface device” which is described in the specification and illustrated (Figure 10) as clearly being an independent device that interconnects to the residential gateway. Accordingly, it is unclear as to how one is enabled to create a “unitary residential gateway” that further comprises a distinctive “media interface device” which is mounted onto the outside of the residential gateway (IA: Page 25, Lines 6-15; Page 26, Lines 4-22). Rather, it would appear that support is found such that the system, as opposed to the residential gateway, further comprises the media interface device.

#### *Claim Rejections - 35 USC § 102*

12. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

13. Claims 1, 3-7, 13-14, 18, 20-24, 31, 35, 37-43, and 45-47 are rejected under 35

U.S.C. 102(e) as being anticipated by Ehreth (US Pat No. 6,286,142).

In consideration of claim 1, the Ehreth reference discloses a method of “receiving, decoding, and distributing video from a telecommunications network” [40] (Col 1, Lines 44-50) to a “plurality of televisions in at least two separate locations” [100] within a “residential environment” [102] (Figure 1) via a “residential gateway” [30] (Col 2, Line 59 – Col 3, Line 10). The method comprises “receiving at least one channel select command from one of a plurality of remote control devices associated with a respective one of the plurality of televisions” [50] wherein “at least a first one of the plurality of remote control devices transmits the channel select command directly to a receiver within the residential gateway” [80]. The “residential gateway” [30], which is a “unitary device” by nature of its illustrated enclosed housing is “capable of directly receiving a plurality of channel select commands from said plurality of remote control devices” [50] given that channel select command derived from the “remote control devices associated with the television” is sent directly to the gateway without requiring the usage of any intermediate devices. Subsequent to or in concert with the “select command”, the “residential gateway” [30] “receives a video signal from the telecommunication network” [40], “transports the video signal” to be “processed” [34] (Col 3, Lines 34-50), and “transmits the at least one television signal over the media from the residential gateway” [90] to the aforementioned “plurality of televisions” [100] (Col 3, Lines 2-4; Col 4, Lines 44-62).

Claim 3 is rejected wherein the device is further operable to receive “channel select commands” from IR “wireless remote control devices” [70] located “remotely from the residential gateway” as illustrated in Figure 1 (Col 3, Line 65 – Col 4, Line 12).

Claim 4 is rejected wherein the disclosure teaches that the “wireless remote control devices” [70] may further transmit “channel select commands” to remote control devices associated with the plurality of televisions or “remote antennae packages” [50]. The aforementioned “remote antennae packages” [50] subsequently directly “transmit the wireless signals from the remote antennae packages to the residential gateway to the residential gateway over media” (Col 3, Lines 2-5; Col 4, Lines 13-43).

Claim 5 is rejected wherein the “residential gateway” [30] further serves as a “media interface device” in so far as it serves as the “interface” for the distribution of signals between the in-home wiring [90] and the telecommunications network [40]. The claim is not necessarily limiting with respect to the “residential gateway” not being further interpreted as a “media interface device”. Accordingly, the “media interface” is operable to “receive” and “extract” the “channel select commands” and subsequently “transmit” the aforementioned commands to “a remote control processor” [80] (Col 4, Lines 44-62).

Claim 6 is rejected wherein the “media is coaxial cable” and the aforementioned “media interface device” is subsequently a “coaxial interface device” (Col 3, Lines 51-54).

Claim 7 is rejected wherein the “media interface device” [30] may further comprise a “remote antenna module” [80].

Claim 13 is rejected wherein as aforementioned “at least one television signal” [40] is “transmitted” to and “processed” by a “media interface device” [30] for “at least one television” [100].

Claim 14 is rejected wherein the embodiment further comprises a “splitting” the aforementioned “at least one television signal” so as to “transmit” the television signal to “separate locations” based on the requested program (Col 5, Lines 15-29).

Claim 18 is rejected wherein Figure 1 of the Ehreth reference discloses a “residential gateway” [30] that is a “unitary device” that is operable to distribute video signals to “plurality of televisions in at least two separate locations” [100] (Figure 1) (Col 2, Line 59 – Col 3, Line 10). As illustrated in Figure 1, the “residential gateway” comprises a “receiver” [80] for “directly receiving channel select commands from remote control devices” [50], a “network interface module” [32] and a “video processor” [32] that “transmits the at least one television signal over media to a corresponding television”. Both the “network interface” [32] and the “modulating unit” [34] interface with the distribution media [20/90].

Claim 20 is rejected wherein the “residential gateway” [30] further comprises a “remote control module” [80] (Col 4, Line 44 – Col 5, Line 14).

Claim 21 is rejected wherein Figure 1 illustrates “remote antennae packages” [50] in close proximity to and coupled to television which “receives wireless signals” from the “wireless remote control devices” [70] and subsequently inherently “modulates the wireless signal” for transmission over “media” [90] to the “residential gateway” [30] (Col 4, Lines 24-43).

Claim 22 is rejected wherein the “residential gateway” [30] comprises a “media interface device” [80] that couples the external telecommunication network [40] to the “remote control antennae packages” [50] via the internal “media” [90]. As aforementioned, the “media interface device” [80] “receives” and “extracts” the “channel select commands” (Col 4, Lines 44-62).

Claim 23 is rejected wherein the “media is coaxial cable” and the aforementioned “media interface device” is subsequently a “coaxial interface device” (Col 3, Lines 51-54).

Claim 24 is rejected wherein the “media interface device” [80] may further comprise a “remote antenna module” that is operable to “extract channel select commands”.

Claim 31 is rejected wherein the aforementioned “media interface device” [80] is “directly connected” to or embedded within the “residential gateway” [30] (Col 4, Lines 48-51).

Claim 35 is rejected wherein the Ehreth reference illustrates a “method of receiving and decoding signals” from a “telecommunications network” [40] and transmitting the signals from the “residential gateway” [30] to a “plurality of devices” [100]. As illustrated, the “residential gateway” [30] is a “unitary device” in an enclosed housing that serves to “connect each of the plurality of devices and the telecommunications network”. The “residential gateway” [30] is operable to “receive” [32] a video signal from the telecommunications network [40] and to “directly receive [via a] receiver within the residential gateway” [80] the “channel select commands” from a “plurality of remote control devices” [70] such that the “processing” [80] these commands results in the “transmission”

of the video signal “over the media” [90] from the “residential gateway” [30] to the “appropriate television” [100] (Col 1, Line 44 – Col 2, Line 5).

Claim 37 is rejected wherein the aforementioned “residential gateway” [30] as illustrated includes connecting televisions [100] remotely located from the “residential gateway” [30] via “remote antennae packages” [50]. The “residential gateway” [200] further comprises a “media interface device” [80] connected to the “residential gateway” which interfaces with “media” [90] to retrieve signals from the “remote antennae packages” [50].

Claim 38 is rejected wherein the aforementioned “media interface device” [80] is “directly connected” to or embedded within the “residential gateway” [30] (Col 4, Lines 48-51).

Claim 39 is rejected wherein the “residential gateway” [30] is further operable to receive [80] “channel select commands” from an IR or “optical remote control devices” [70] located “remotely from the residential gateway” or “in close proximity to the residential gateway” as illustrated in Figure 1 (Col 3, Line 65 – Col 4, Line 12; Col 5, Lines 15-29). The claim does not specify that the “receiver” [80] necessarily receives the signal as an optical signal.

Claim 40 is rejected as aforementioned with respect to claim 39 wherein an IR remote is a “wireless remote control device” [70].

Claim 41 is rejected wherein the disclosure teaches that the “wireless remote control devices” [70] may further transmit “channel select commands” to “remote antennae packages” [50]. The aforementioned “remote antennae packages” [50] subsequently “transmit the wireless signals from the remote antennae packages to the residential gateway over media” (Col 4, Lines 13-23).

Claims 42 and 43 are rejected wherein as aforementioned the “wireless signals” from the “remote antenna packages” [50] are transmitted over the “media” [90] to the “media interface device” [80]. The “channel select commands” are subsequently “extracted” by a “remote antennae module” [80] and “transmitted” to the “remote control processor” [34] which modulates the signals for distribution (Col 3, Lines 40-46).

Claim 45 is rejected wherein Figure 1 of the Ehreth reference illustrates a “method of receiving and decoding signals” from a “telecommunications network” [40] using a “residential gateway” [30] which “transmits the decoded signals” from the “residential gateway” [30] to a “plurality of devices” [100] including “multiple televisions”. The method comprises “connecting the residential gateway to the telecommunications network” [40] and to “at least one television that is remotely located from the residential gateway” [100]. The user is operable to “select a television channel to view for the at least one television by programming associated wireless remote control devices” [70] which “transmit channel select commands as wireless signals to remote antennae packages” [50] “associated with the television”. The “remote antennae packages receive the wireless signals and transmit the wireless signals over media” [90] to a “media interface device” [80] which “demodulates the wireless signals and extracts the portion corresponding to the channel select commands” (Col 1, Line 44 – Col 2, Line 5). The “residential gateway” [30] subsequently “transmits the channel select commands to the telecommunication network” (Col 3, Lines 11-18), “receives a video signal from the telecommunication network”, “processes the video signal corresponding to the channel select commands . . . [using] a video processor” [34], and

“transmits the television signals to the at least one television” (Col 3, Lines 11-64; Col 4, Line 13 – Col 5, Line 14).

Claim 46 is rejected in view of the aforementioned rejection of claim 47 wherein the “residential gateway” [30] comprises a “network interface module for transmitting upstream signals, including channel select commands” [32] to the “telecommunications network” [40], a “video processor for processing the video signals into at least one television signal corresponding to at least one channel select command and transmitting the at least one television signal to the corresponding television” [30], and a “remote control module” [80]. The “remote control module” [80] receives “channel select commands” which are “extracted” from the “media” [90]. These commands were initially “transmitted from a wireless remote control device” [70] to a “remote antennae package connected to the associated television” [50]. The “remote antennae package” [50] subsequently “transmits the wireless signal over media” [90] to a “media interface device” [80] which “demodulates the wireless signals and extracts the portion corresponding to the channel select commands” (Col 1, Line 44 – Col 2, Line 5; Col 3, Lines 11-64; Col 4, Line 13 – Col 5, Line 14).

Claim 47 is rejected as previously set forth in the rejections of claims 45 and 46 wherein the system comprises a “residential gateway” [30] including a “network interface module” [32] and a “video processor” [30], “remote antennae packages” [50], and a “media interface device connected to the residential gateway” [80] for inherently “demodulating” and “extracting” the “channel select command” and “transmitting” it to the “remote control module” [34] within the “residential gateway” [30]. As aforementioned, the “video processor” [32] “transmit[s] the at least one television signal directly to the corresponding

television without going through an intermediate device” (Col 3, Lines 11-64; Col 4, Line 13 – Col 5, Line 14).

14. Claims 50-53 and 55-57 are rejected under 35 U.S.C. 102(e) as being anticipated by Swisher et al. (US Pat No. 6,418,149).

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention “by another,” or by an appropriate showing under 37 CFR 1.131.

In consideration of claims 50 and 56, the system comprising the “residential gateway” [200] and associated components illustrated in Figure 3 are interpreted as comprising a “media interface device” as it is operable to support the “directional direction of signals to multiple devices over a media”. The limitations of the claim are met as follows:

- a “first connector” [652] for receiving a “first signal” or “TV signal” in the “first direction” of heading away from the “residential gateway” [200] via cable [646] to a remote television [198];
- a “second connector” [622] for receiving an upstream network signal away from the “residential gateway” [200] and transmitting a “downstream network signal” towards the “residential gateway” [200];
- a “third connector” [610] for transmitting the “TV signal” and the “upstream network signal” away from the “residential gateway” [200] and receiving the

“downstream network signal” and “wireless signal” in the direction of the “residential gateway”;

- a “diplexer” [620] for extracting the “network signal from the media” in the direction towards the “residential gateway” [620];
- a “remote antenna module” or “fourth connector” [620] for receiving the “wireless signal” associated with the “channel select commands” modulated into the upstream path (Figure 2C) and transmits it towards the “residential gateway” [200].

Claim 51 is rejected wherein the “media interface device” comprises a “balun” [622].

Claim 52 is rejected wherein the embodiment includes a “splitter” [652] wherein the “splitter” comprises a “fifth connector” for “transmitting one of the two identical “first signals” in the “first direction” or towards TV3 [198] via the media [646].

Claim 53 is rejected wherein the aforementioned further comprises a “combiner” [650].

Claim 55 is rejected as aforementioned wherein the aforementioned “media interface device” is “directly connected” to or embedded within the “residential gateway” [200] and is further operable to distributes signals between the multiple devices and the telecommunications network as illustrated in Figures 1 and 2.

Claim 57 is rejected in view of Figure 3 of the aforementioned Swisher et al. reference. The claimed “media interface” is met wherein the Figure comprises “a first connector” [610], a “second connector” [474] (Eames et al ('884) - Figure 6 {expressly incorporated by reference (Col 5, Lines 26-33)}), a “third connector” [650], a “diplexer” [620], a “balun” [622], and a “remote antennae module” [640] that is connected to the “diplexer” [620] (Eames et al.: Figure 6).

***Claim Rejections - 35 USC § 103***

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

16. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

17. Claims 1-2 and 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hamlin (US Pat No. 6,286,142).

In consideration of claim 1, the Hamlin reference discloses a method of “receiving, decoding, and distributing video from a telecommunications network” [24/26/28/30/32/17/37] to a “plurality of televisions in at least two separate locations” [46] within a “residential environment” [12] via a “residential gateway” [34/38/40] (Figure 1; Col 2, Line 54 – Col 3, Line 2). The “residential gateway” [34/38/40], however, is not described as a “unitary device” as opposed to three separately illustrated pieces. It would have been obvious to one having ordinary skill in the art at the time the invention was made to form the

aforementioned components into a “unitary device”, since it has been held that forming in one piece an article which has formerly been formed in two pieces and put together involves only routine skill in the art. Howard v. Detroit Stove Works, 150 U.S. 164 (1893).

Similarly, the court affirmed the rejection holding, among other reasons, "that the use of a one piece construction instead of the structure disclosed in [the prior art] would be merely a matter of obvious engineering choice.") Furthermore, the particular incorporation of the pieces comprising the gateway into a “unitary device” would further advantageously serve to reduce the cost associated with the device given that only a single enclosure would be required.

The method comprises “receiving at least one channel select command from . . . [a] remote control devices associated with a respective one of the plurality of televisions” [42] wherein “at least a first one of the . . . remote control devices transmits the channel select command directly to a receiver within the residential gateway” [34/38/40] in light of the “residential gateway” being a unitary device (Col 3, Lines 18-23; Col 6, Lines 7-17). The reference does not explicitly disclose a “plurality of remote control devices” [42], but suggests and claims the usage of at least one remote control device (Col 8, Line 43). Accordingly, it would have been obvious to utilize a “plurality of remote control devices” identical to those disclosed in view of the suggestion for at least one remote control device for the inherent advantages associated with such including the ability for individual users to remotely control their own televisions without needing to share the common remote.

The “residential gateway” [34/38/40] further “receives a video signal from the telecommunication network” [24/26/28/30/32/17/37], “transports the video signal” to be

“processed . . . to produce at least one television signal corresponding to the at least one channel select command” [104], and “transmits the at least one television signal over the media from the residential gateway” [36] to the aforementioned “plurality of televisions” [46] (Col 3, Lines 23-54).

Claim 2 is rejected wherein “said receiving at least one channel select command includes receiving channel select commands from an optical remote control device associated with a television located in close proximity to the residential gateway at an optical receiver within the residential gateway” (Col 6, Lines 8-17).

In consideration of claim 18, as previously set forth, the Hamlin reference discloses a “residential gateway” [34/38/40] for “distributing video signals to a “plurality of televisions within at least two separate locations” [46] in a “residential environment” [12] (Figure 1; Col 2, Line 54 – Col 3, Line 2). As aforementioned, the “residential gateway” [34/38/40] is not described as a “unitary device” as opposed to three separately illustrated pieces. It would have been obvious to one having ordinary skill in the art at the time the invention was made to form the aforementioned components into a “unitary device”, since it has been held that forming in one piece an article which has formerly been formed in two pieces and put together involves only routine skill in the art. *Howard v. Detroit Stove Works*, 150 U.S. 164 (1893). Similarly, the court affirmed the rejection holding, among other reasons, “that the use of a one piece construction instead of the structure disclosed in [the prior art] would be merely a matter of obvious engineering choice.”) Furthermore, the particular incorporation of the pieces comprising the gateway into a “unitary device” would further advantageously

serve to reduce the cost associated with the device given that only a single enclosure would be required.

The “residential gateway” [34/38/40] comprises a “receiver for directly receiving channel select commands” from a “remote control device” [42] associated with the “televisions” [46], a “network interface module” [34], and a “video processor for processing the video signals to produce at least one television signal wherein the video processor transmits the at least one television signal” over “media” [36] to a “corresponding television” [46]. As aforementioned, the reference is unclear as to the existence of multiple remote control devices in the system, but suggests and claims the usage of at least one remote control device (Col 8, Line 43). Accordingly, it would have been obvious to utilize a “plurality of remote control devices” identical to those disclosed in view of the suggestion for at least one remote control device for the inherent advantages associated with such including the ability for individual users to remotely control their own televisions without needing to share the common remote.

Claim 19 is rejected wherein “said receiving at least one channel select command includes receiving channel select commands from an optical remote control device associated with a television located in close proximity to the residential gateway at an optical receiver within the residential gateway” (Col 6, Lines 8-17).

18. Claims 2, 19, and 32-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ehreth (US Pat No. 6,286,142), in view of Hamlin (US Pat No. 5,574,964).

In consideration of claims 2 and 19, the Ehreth reference does not explicitly disclose nor preclude that the “receiving at least one channel select command” may not be further

conducted via an “optical receiver within the residential gateway”. Applicant’s admission of fact provides evidence that the particular usage of an integrated “optical receiver” in conjunction with video program distribution device is notoriously well known in the art. For example, the Hamlin reference provides evidence as to the existence of “residential gateways” [34/38/40] with “televisions located in close proximity to the residential gateway” [46] wherein the “residential gateway” [34/38/40] comprises an “optical receiver” (Col 6, Lines 8-13). Accordingly, it would have been obvious to one of ordinary skill in the art to modify “residential gateway” [30] of Ehreth to further include an IR or “optical receiver” for the inherent advantages associated with such including the ability to advantageously facilitating the operation of a “television located in close proximity to the residential gateway” [30] that does not accept IR commands and to further provide a means for “at least one of a plurality of remote controllers” within operational radius to control or program the signal distribution system (Hamlin: Col 5, Lines 31-45) and to further provide versatility, and mobility while communicating with the gateway. For example, taken in combination, a modification to the Ehreth “gateway” [30] so as to further directly accept IR commands via the remote control of Hamlin would advantageously enable a user to remotely control other televisions/devices within the system.

Claim 32 is rejected wherein the embodiment further comprises a “media interface device” [32/34] for “processing the at least one television signal” and “transmitting the processed television signal to the at least one television”.

Claim 33 is rejected wherein the embodiment further comprises a “splitting” the aforementioned “at least one television signal” so as to “transmit” the television signal to “separate locations” based on the requested program (Ehreth: Col 5, Lines 15-29).

Claim 34 is rejected wherein the aforementioned device comprises a “combiner” [34] that is operable to modulate onto any one of a plurality of downstream RF channels for appropriate distribution over a common medium [90] (Col 3, Lines 40-46).

19. Claims 8-12, 25-30, 36, and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ehreth (US Pat No. 6,286,142).

In consideration of claims 8 and 25, the Ehreth et al. reference discloses that the “wireless remote control devices” may utilize IR signaling or other suitable signal transmission media for entering user input information. The reference subsequently discloses the claimed invention except for the “wireless remote control devices” utilizing UHF as opposed to IR. It would have been obvious to one having ordinary skill in the art at the time of the invention was made to utilize UHF signals since the equivalence of “UHF” and IR for their use in the remote controller art and the selection of any of these known equivalents to remotely control or signal a television would be within the level of ordinary skill in the art as further supported by applicant’s admission of fact. Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to particularly utilize a “UHF remote control device” for the purpose of providing a remote control device that is not limited to line of sight transmissions.

In consideration of claims 9 and 26, the Ehreth et al. reference does not explicitly disclose the frequency utilized in conjunction with upstream signaling. It is notoriously well

known in the art to utilize “433 Mhz” in conjunction with the distribution of “UHF signals” as supported by applicant’s admission of fact. Accordingly, it would have been obvious to one of ordinary skill in the art to “transmit” the UHF signals at “433 MHz” for the purposes of using a standard transmission frequency that is commonly utilized in the transmission of signals from “wireless remote controls”.

In consideration of claim 10, the Ehreth et al. reference does not explicitly specify the “frequency” wherein channel commands are extracted [80]. It is notoriously well known in the art to extract channel select commands as a “1 kHz signal”, as supported by applicant’s admission of fact. Accordingly, it would have been obvious to one of ordinary skill in the art at the time of the invention, to modify the “remote antennae module” [80], if necessary, to extract the channel select command as a “1 KHz signal” for the purpose of utilizing a simple signaling protocol between the “remote antenna package” [50] and the residential gateway [30].

In consideration of claims 11 and 29, the reference discloses that the embodiment is operable to facilitate bi-directional communications with the “telecommunication network” [40] (Col 3, Lines 11-18) and that the network may transmit both data and video signals (Col 3, Lines 46-60). The reference, however, does not explicitly disclose that the “media interface device” [30] does not further comprise a “diplexer”. The use of diplex filters is notoriously well known in the art, as supported by applicant’s admission of fact. Accordingly, it would have been obvious to one of ordinary skill in the art to modify the “media interface device” [30] to further comprise provide a “diplexer” for the purpose of

ensuring frequency separation between upstream and downstream communications in a manner that further reduces the ingress/egress noise within the system.

In consideration of claims 12 and 30, the reference discloses that the “media interface device” [30] is operable to interface with external transmission media [20] as well as the internal distribution network [90] (Col 3, Lines 18-23). The reference, however, does not explicitly disclose the use of a “balun”. The use of “baluns” is notoriously well known in the art, as supported by applicant’s admission of fact. Accordingly, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the “media interface device” [30], if necessary, to utilize a “balun” for the purpose of ensuring that the impedance of the external network matches that of the internal network as to reduce noise (reflections) introduced into the system due to mismatched media impedances.

Claim 27 is rejected wherein the “remote antennae packages” [50] “modulates the wireless signal” for transmission over “media” [90] to the “residential gateway” [30] based on the user selectable frequency (Col 4, Lines 24-43).

In consideration of claim 28, the Ehreth et al. reference does not explicitly specify the “frequency” wherein channel commands are extracted [80]. It is notoriously well known in the art to extract channel select commands as a “1 kHz signal”, as supported by applicant’s admission of fact. Accordingly, it would have been obvious to one of ordinary skill in the art at the time of the invention, to modify the “remote antennae module” [80], if necessary, to extract the channel select command as a “1 KHz signal” for the purpose of utilizing a simple signaling protocol between the “remote antenna package” [50] and the residential gateway [30].

Claim 32 is rejected wherein the embodiment further comprises a “media interface device” [32/34] for “processing the at least one television signal” and “transmitting the processed television signal to the at least one television”. Both the “network interface” [32] and the “modulating unit” [34] interface with the distribution media [20/90].

Claim 33 is rejected wherein the embodiment further comprises a “splitting” the aforementioned “at least one television signal” so as to “transmit” the television signal to “separate locations” based on the requested program (Col 5, Lines 15-29).

Claim 34 is rejected wherein the aforementioned device comprises a “combiner” [34] that is operable to modulate onto any one of a plurality of downstream RF channels for appropriate distribution over a common medium [90] (Col 3, Lines 40-46).

In consideration of claims 36 and 44, the Ehreth et al. reference suggests that the distribution network [90] may utilize other transmission media and does not explicitly preclude that the distribution network [90] may not utilize “S-video cables” as are known in the art. Accordingly, it would have been obvious to one of ordinary skill in the art to utilize other media to connect a “television located in close proximity” [100], as opposed to those in a remote site [104], to the “residential gateway” [30] for the purpose of improving video quality by distributing each of the color components separately.

***Allowable Subject Matter***

20. Claims 54 and 58 are allowed.
21. The following is a statement of reasons for the indication of allowable subject matter:

The applicant has provided evidence in this file showing that the invention was owned by, or subject to an obligation of assignment to, the same entity as the Swisher et al. (US Pat No. 6,418,149) patent at the time this invention was made. Accordingly, the Swisher et al. reference is disqualified as prior art through 35 U.S.C. 102(e), (f) or (g) in any rejection under 35 U.S.C. 103(a) in this application. The applied art does not qualify as prior art under another subsection of 35 U.S.C. 102 and accordingly is disqualified as prior art under 35 U.S.C. 103(a) and as such cannot be modified so as to incorporate an “X by Y splitter with additional connectors” as is known in the art.

22. Claims 48 and 49 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. In particular, the interpretation of the “media interface device” [80] as applied to claim 47 fails to particularly utilize the required “splitter”, “balun”, and “diplexer”. While the reference suggests that the particular in-home wiring may comprise any composition, the only reference of record that teaches the particular interconnection required for a “media interface device” is the Swisher et al. reference which as been previously disqualified in any rejection under 35 U.S.C. 103(a) in this application.

### *Conclusion*

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure as follows. Applicant is reminded that in amending in response to a rejection of claims, the patentable novelty must be clearly shown in view of the state of the art disclosed by the references cited and the objections made.

Art Unit: 2614

- The Schultheiss (US Pat No. 6,208,384) reference provides evidence that it is known in the art for a gateway to comprise an optical receiver..

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott Beliveau whose telephone number is 703-305-4907. The examiner can normally be reached on Monday-Friday from 9:00 a.m. - 6:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John W. Miller can be reached on 703-305-4795. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-HELP.

SEB

January 19, 2005



JOHN MILLER  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600